CENTER ROUTING SLIP

FROM	DATE
	6 OCT

TO		INITIALS	DATE
DIRECTOR	2	ACL	10/6
DEP/DIRECTOR	3	[illegible]	10/6
EXEC/DIRECTOR	5	[illegible]	10/8
SPECIAL ASST	4	M	10/8
ASST TO DIR	1	TAL	10/6
ASST TO DEP/DIR			
[redacted]			
CH/PPBS			
DEP CH/PPBS			
EO/PPBS			
CH/IEG			
DEP CH/IEG			
EO/IEG			
CH/PSG	6	Seen	—
DEP CH/PSG			
EO/PSG			
CH/TSSG			
DEP CH/TSSG			
EO/TSSG			
CH/SSD/TSSG			
PERSONNEL			
LOGISTICS			
TRAINING			
RECORDS MGT			
SECURITY			
FINANCE			
DIR/IAS/DDI			
CH/DIAXX-4			
CH/DIAAP-9			
CH/SPAD			

REMARKS

U-2 COVERAGE OF THE CAMILLE DAMAGE —

1-6 PLEASE CALL RE PART II OF ACL'S COMMENT
TAL.

Berger returned to Bowdens —

~~1-6 WHAT~~ — W~~HERE WILL THI~~S ~~BE KEPT~~?

TL —
(1) Suggest you show this to [redacted]
(2) and also to consider a board for our peaceful uses pkg. that could use the annotated destructions from the OEP Report
ACL.

Two boards were produced for ACL, 1 on Gulfport & 1 on [illegible]

IP FM 30 (11-68) - OBSOLETE PREVIOUS EDITIONS

Sanitized Copy Approved for Release 2010/03/25 : CIA-RDP80T01137A000300040005-9

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF EMERGENCY PLANNING

ROUTING SLIP

TO	BLDG AND ROOM	INITIALS	DATE
[redacted]			10/3/69
3.			
4.			
5.			

- ☐ APPROVAL
- ☐ APPROPRIATE ACTION
- ☐ RECOMMENDATION
- ☐ RECOMMEND SIGNATURE
- ☐ PREPARE REPLY
- ☐ NOTE AND FILE
- ☐ NOTE AND RETURN
- ☒ INFORMATION

REMARKS: Copy of the Camille study for your retention and most thanks for the support and help.

1 & 2 for Info

FROM (NAME AND ORGANIZATION)	DATE
[redacted]	1 Oct 69
OEP/ RED-NRAC (BUILDING AND ROOM NUMBER)	PHONE 102-5152

FORM OEP 27
NOVEMBER 1961

STAT

STAT

HURRICANE "CAMILLE"

An Appreciation of the Damage As Interpreted from Aerial Photography

by

[redacted] STAT

Resource Evaluation Division
National Resource Analysis Center
Office of Emergency Preparedness

August 29, 1969

Sanitized Copy Approved for Release 2010/03/25 : CIA-RDP80T01137A000300040005-9

ACKNOWLEDGEMENTS

Grateful acknowledgements are extended to the following individuals and organizations for their assistance in the preparation of this study and without whose cooperation it would not have been possible:

[redacted] and his enthusiastic staff at the U. S. Geological Survey, Special Projects Office, Reston, Virginia, for their support in providing photographic and related technical support as well as working facilities; STAT

[redacted] Office of Science and Technology, Executive Office of the President, for his forthright and prompt efforts in acquiring from the U. S. Topographic Command, the photographic imagery of the Camille disaster areas; STAT

[redacted] Earth Resources Program, NASA Headquarters, and to other individuals there and at the NASA Manned Spacecraft Center, Houston, for initial efforts and "alerts" as to availability of Camille imagery; STAT

[redacted] Emergency Operations Office, Corps of Engineers, U. S. Army, for his efforts leading to the acquisition of this photography; STAT

And to others in OEP, USGS, the Department of Agriculture whose encouragement and support has been most helpful.

FOREWORD

As the media reports became available describing the extent of the devastion along Mississippi coastal areas and initial uncertainties as to details and specifics, it was almost a "reflex" to make inquiries as to: (a) existence and availability of aerial coverage of the area involved, and (b) requirements placed by OEP or other Federal agencies for such coverage. As an indication of similar concern, several inquiries had been received by the author during this period from Federal and private sources as to the need for and the existence of coverage.

Our first formal inquiries starting August 25 were discouraging, indicating uncertainty as to availability and requirements for same. Fortunately, these initial reports were unfounded. Further information revealed that indeed the Corps of Engineers had requested area coverage of the U. S. Air Force, presumably for area surveys, engineering works applications, rehabilitation, and relief purposes. By August 26, it had been determined that a complete set of the coverage was in Washington at the U. S. Topographic Command. Also, that NASA, Houston had utilized its Earth Resources Aircraft to flying over the area with a variety of sensor equipment (color, color infra red, and black and white photography). Steps were taken to gain access to the Corps of Engineers coverage as well as the NASA imagery. By Wednesday morning, August 27, a complete set of duplicate positive film (20 cans) had been delivered to the USGS facility at Reston, Virginia for use by those Federal agencies with needs so to use it. Similar arrangements were made to acquire copies of the NASA film. Arrangements were then made to view the material at Reston. By close of business August 27, a selection of the photo exposures for annotation and enlargement, and an initial interpretation of major damaged areas had been accomplished.

The principal purpose in presenting this study, preliminary as it is, is to demonstrate a quick reaction capability that is available to those Federal, State and local agencies with the need for it. As these agencies are suddenly confronted with disaster management problems of great magnitude, one of their earliest requirements is for definitive information. The aerial photographic medium is a source of information which is capable of providing much of this needed information and in a fairly rapid time sense.

In this spirit the following illustrated report was undertaken. It does not attempt to present a detailed analysis of area or local damage effects. Several areas were chosen for analysis and illustration. Much more damage than described was visible in the photography and therefore reportable. For example, the residential areas in Gulfport and Pass Christian selected for annotation, represent large and very obvious areas of contiguous damage. Adjoining areas along the water front and further inland had suffered almost equally from the severity of flood waters and wind. More detailed interpretation would develop these areas as well.

Photographic Notes:

USAF coverage: Mission Camille, August 21, 1969, scale: approx. 1:27,000.

NASA coverage: (Not yet available at this writing.) Flown August 19, 20, 1969; several missions; high and low altitudes; coverage with black and white, color, infra red, black and white infra red.

Gulfport, Mississippi — Exhibit A

Gulfport Harbor Area — Exhibit A-1

Note: 1. (3) beached ships - 450 ft - 490 ft length

2. Breakwater and yacht basin - breached dolphins and piers; absence of small boats.

3. Damage and destruction of buildings on wharves and piers. Roughly 15-20 warehouses and other buildings damaged or destroyed.

Residential Area — Exhibit A-2

Beach front residential area 1-2 miles in length with almost complete destruction of housing.

U. S. Naval Reservation — Exhibits A-3, A-4

6 large warehouse buildings (550' x 110') almost totally damaged

4 warehouses (230' x 90') destroyed

17 warehouses (185' x 40') severely damaged

Pass Christian, Mississippi — Exhibit B

From the photographs, it would appear that this small town along the gulf-front was almost completely washed out. Dwellings have been washed away or from foundations and deposited considerable distances away; barges are observed 1-2 miles inland, etc.

Residential Section — Exhibit B-1

An area of major destruction. Of more than 200 buildings previously standing, about 1/2 appear to have been destroyed.

Highway Bridge — Exhibit B-2

Highway Bridge about 2 miles north of Pass Christian crossing Bayou Portage, was partially damaged. One span is out and damage is visible on another.

Remarks

The foregoing interpretation report is very cursory. As noted in the foreword, it attempts to demonstrate graphically the wealth of information in the aerial photographic imagery that is available to disaster managers, and to indicate the relative facility and rapidity with which data can be developed.

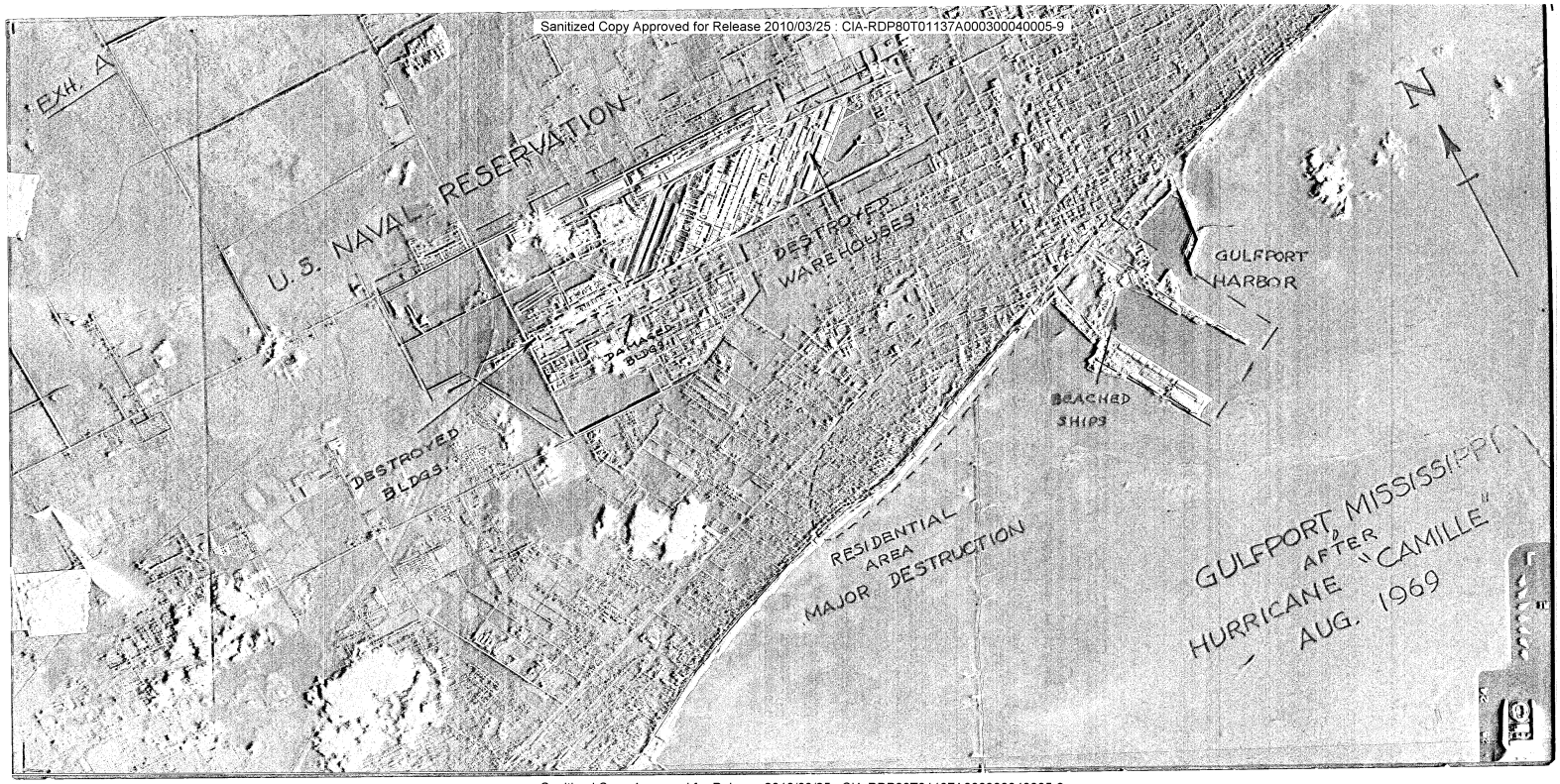
The extraction of information presents little or no problem save that required to assemble photographic interpreters and to put them to work analyzing the photography. Upon receipt of disaster coverage of an area of this magnitude, an information report could be ready for dissemination within an hour or two. Follow-up detailed reports, somewhat longer. Photographic interpretation skills are readily available within the Federal establishment in the Washington area. They are available to a lesser extent at State and local levels within regional and other offices of USDA, USGS, Corps of Engineers and others. It becomes a matter of delineating the work needed and getting it underway.

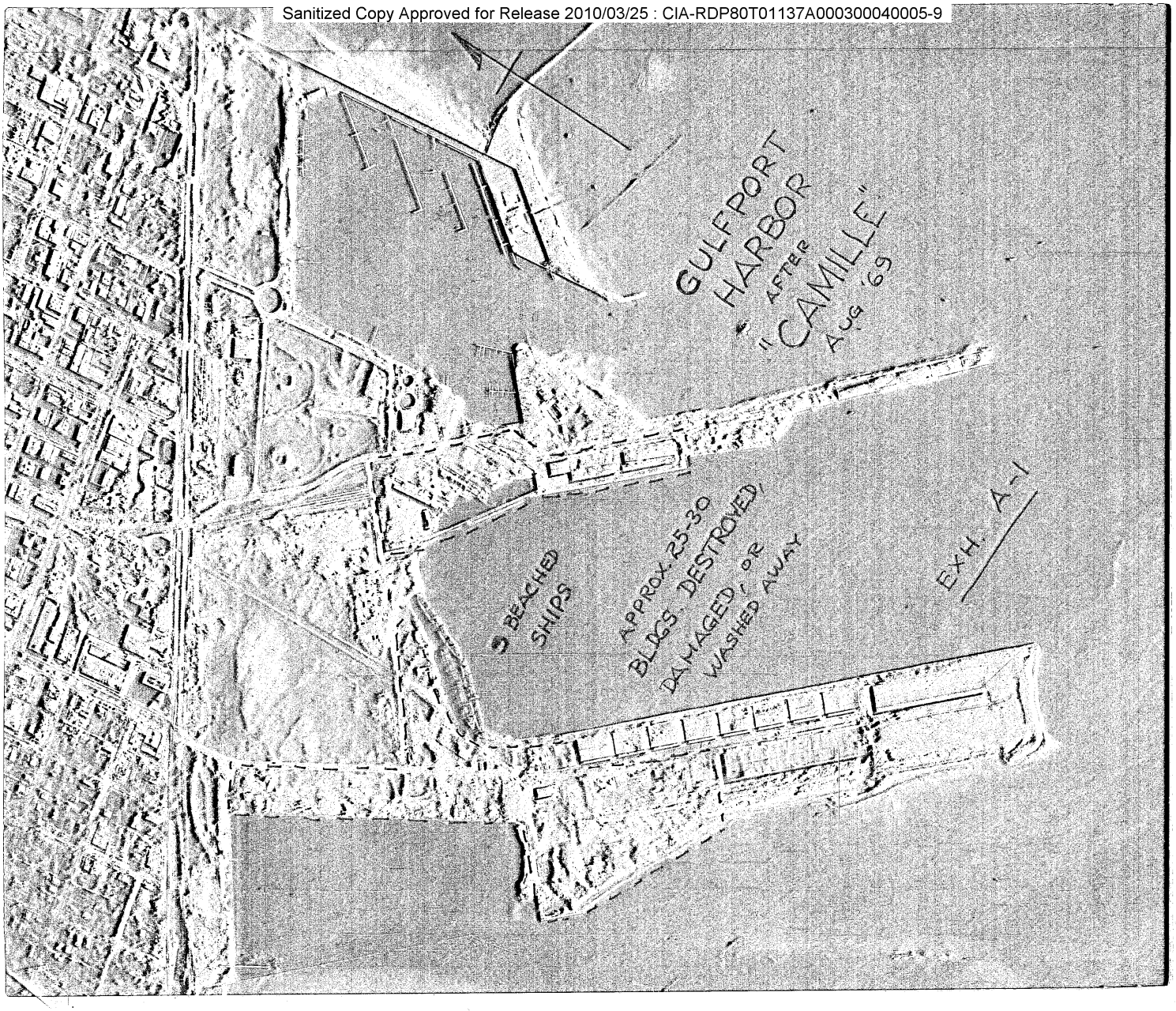
Perhaps the two most pointed observations to be made from this study are:

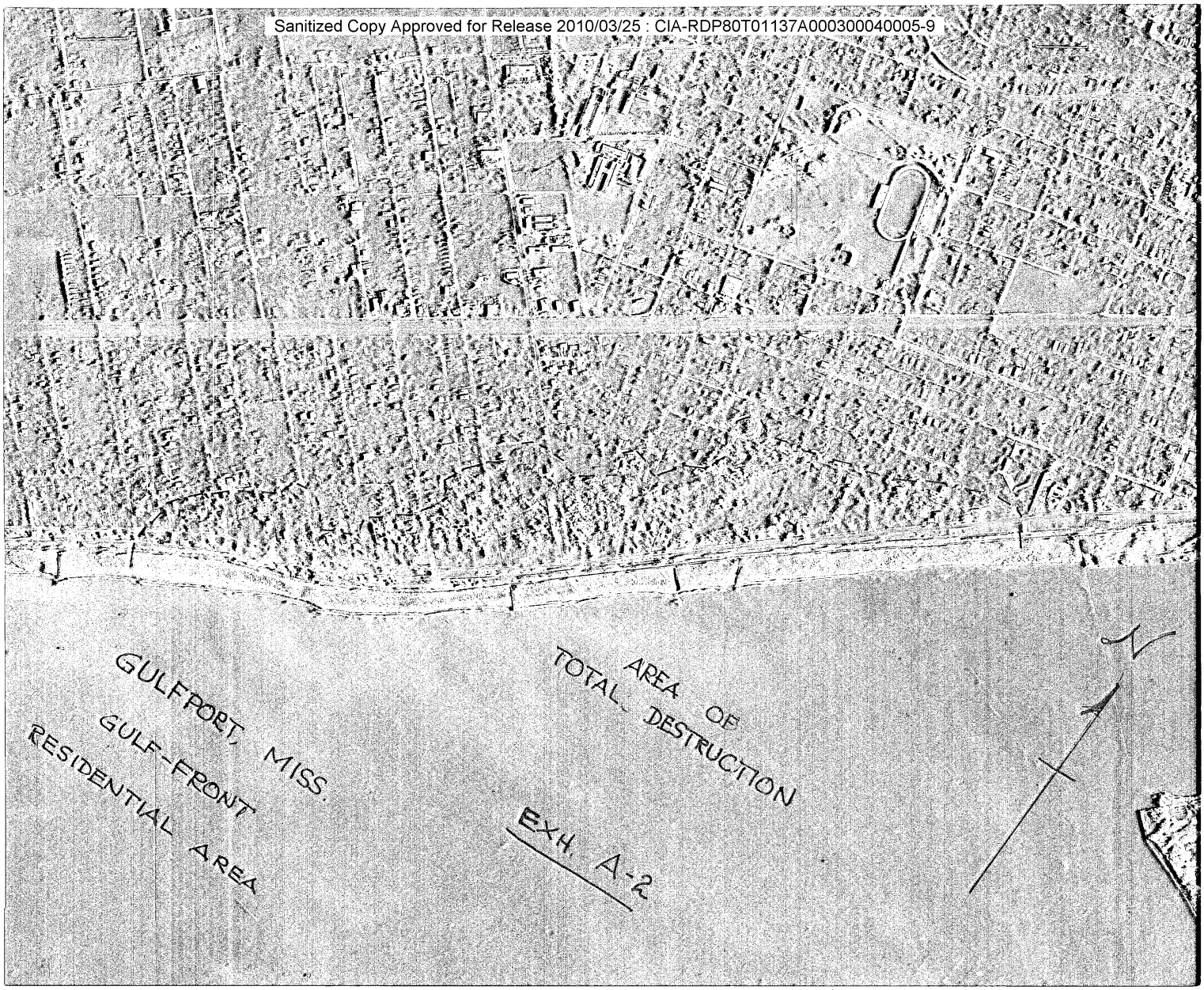
1. The almost uniform interest, cooperation and support in making the fullest use of aerial photographic and other sensor imagery under the disaster conditions created by Camille.

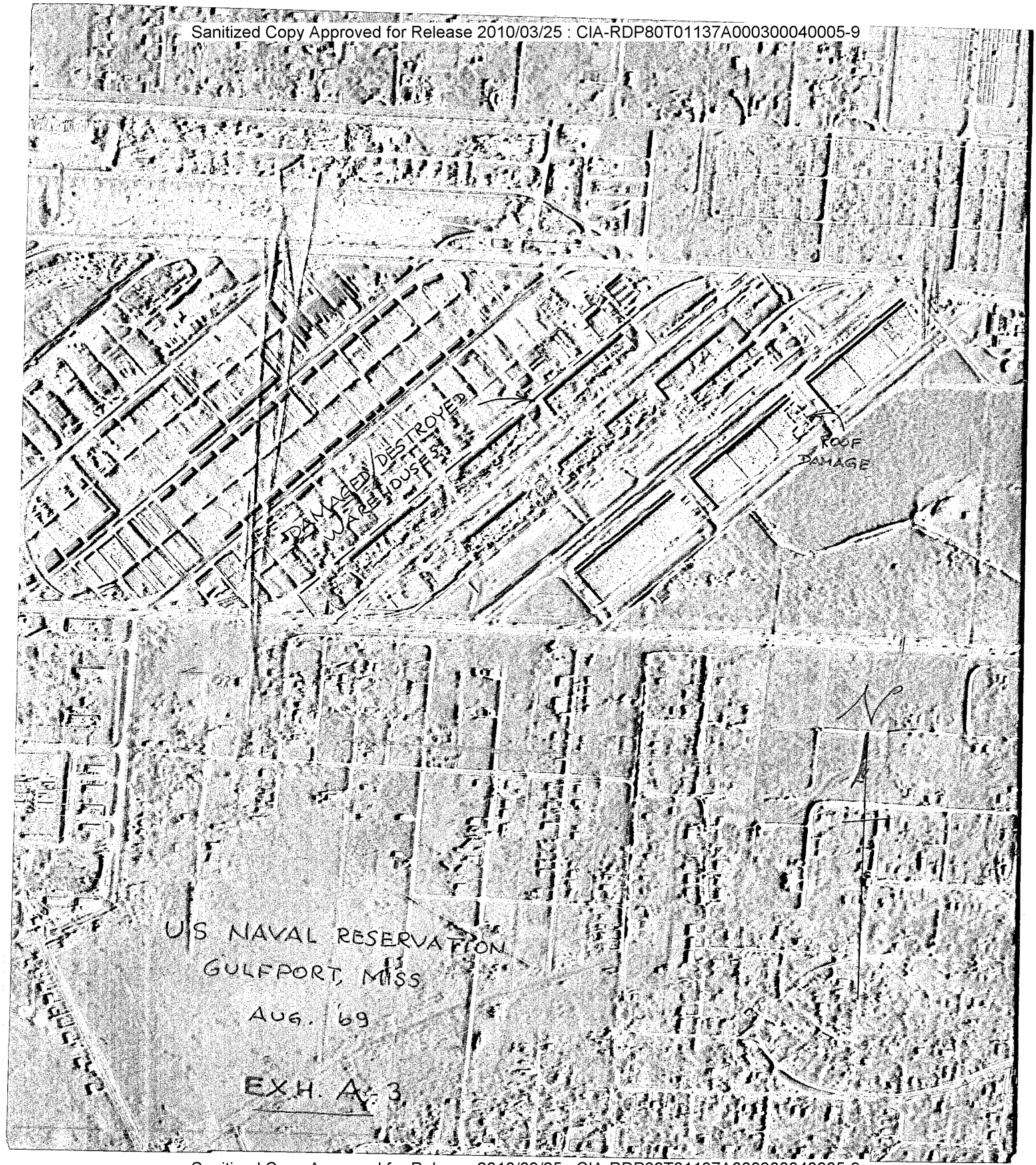
2. The apparent lack of a visible and coordinated effort to develop uniform requirements for disaster aerial surveys; to report on the availability of same; and the generation of a common requirement for the information contained therein.

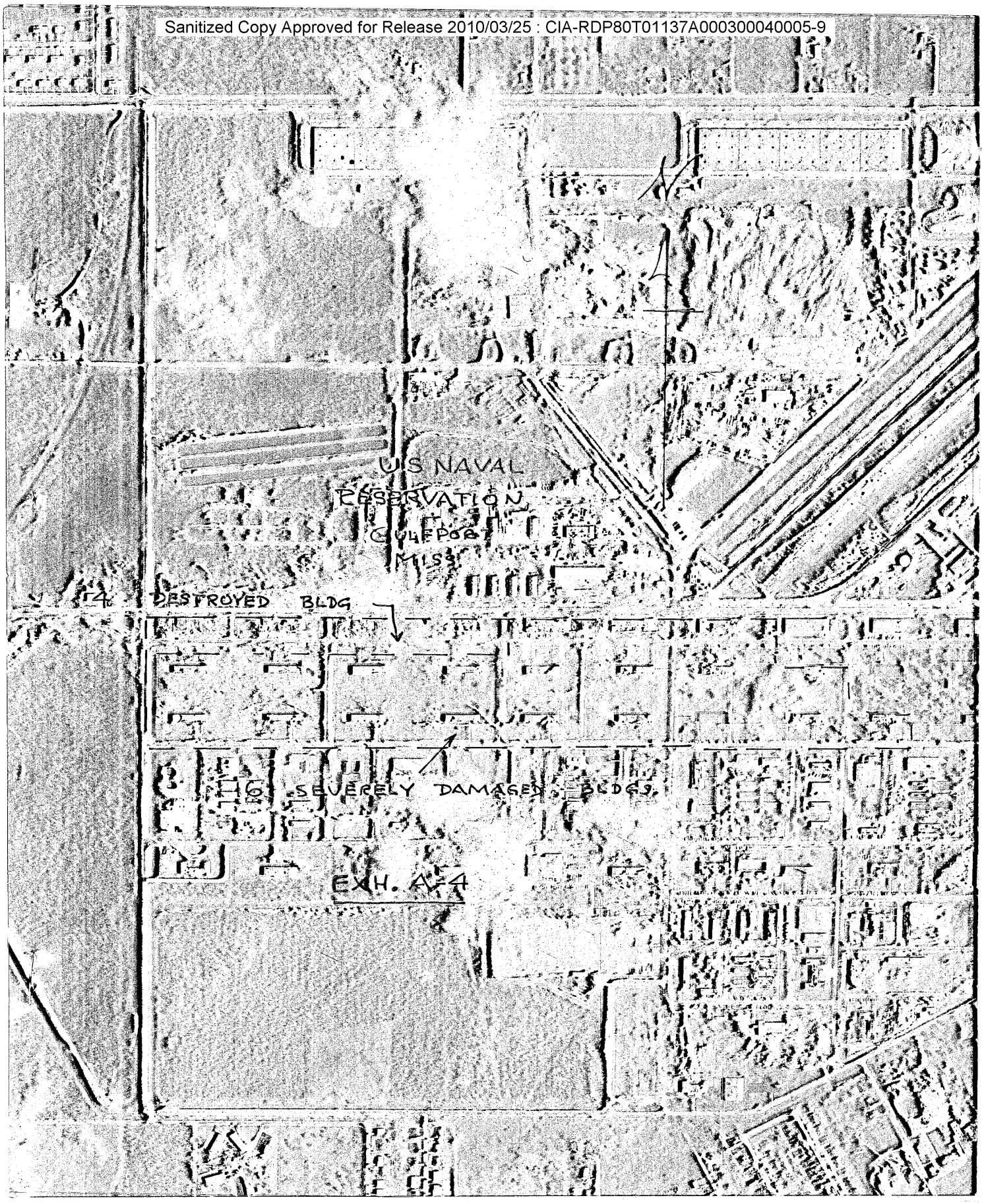
It is noteworthy that elements of the Federal establishment accustomed to utilize photographic survey information are currently discussing the establishment of formal procedures for future use in this connection. It is the opinion of the author that OEP should provide the coordination element.

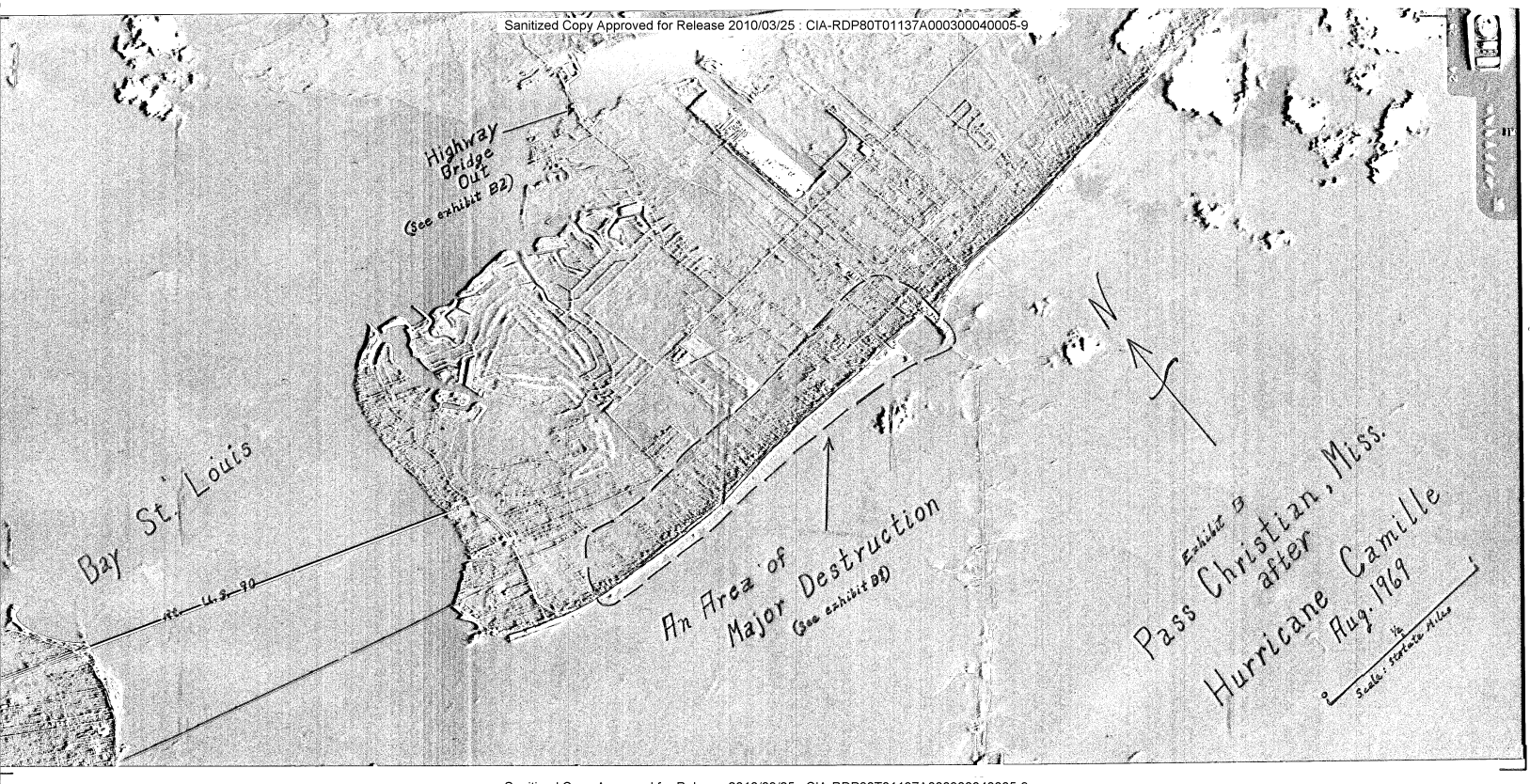












Sanitized Copy Approved for Release 2010/03/25 : CIA-RDP80T01137A000300040005-9

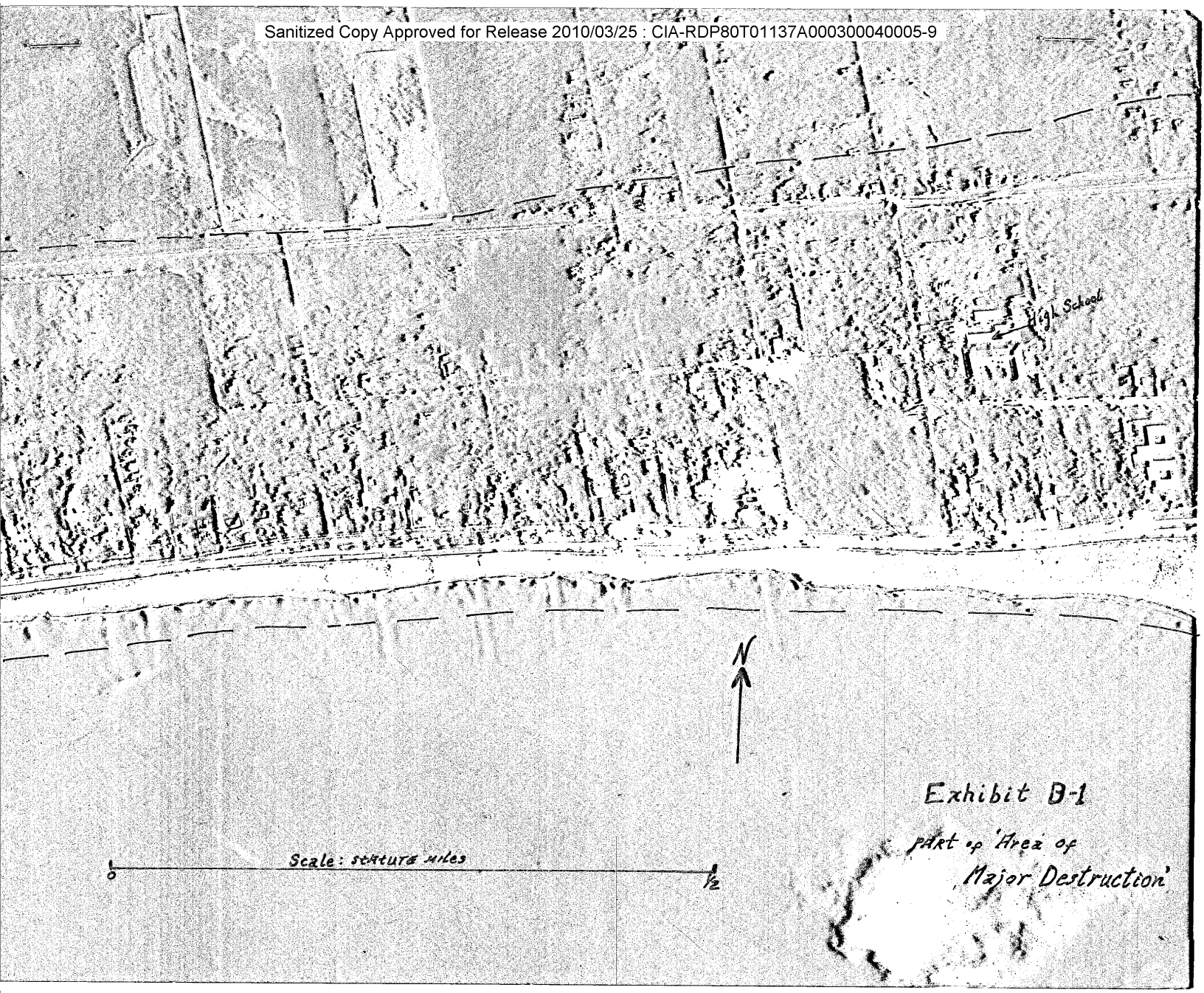


Exhibit B-1

part of 'Area of Major Destruction'

Sanitized Copy Approved for Release 2010/03/25 : CIA-RDP80T01137A000300040005-9